

UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA

Liberty Mutual Insurance Company
a/s/o Craig Kroonblawd,

Plaintiff,

v.

Civil No. 08-859 (JNE/SRN)
ORDER

CFC, Inc., d/b/a Columbus Foods
Company,

Defendant.

Anthony J. Morrone, Esq., Cozen O'Connor, and Stephen M. Warner, Esq., O'Neill & Murphy, LLP, appeared for Plaintiff Liberty Mutual Insurance Company a/s/o Craig Kroonblawd.

Gordon H. Hansmeier, Esq., and Eric S. Oelrich, Esq., Rajkowski Hansmeier Ltd, appeared for Defendant CFC, Inc., d/b/a Columbus Foods Company.

Liberty Mutual Insurance Company (Liberty), as the subrogee of Craig Kroonblawd, asserts negligence and product liability claims against CFC, Inc. (CFC), d/b/a Columbus Foods Company. Liberty seeks recovery of an insurance payment it made to Kroonblawd to cover smoke damage to his house that Liberty maintains occurred when towels contaminated with CFC's "Sunrise Liquid Frying Creamy Pure Vegetable Shortening" (Creamy Shortening) spontaneously combusted after being laundered. The case is before the Court on CFC's motions to exclude the expert reports and testimony of Liberty's expert witnesses and for summary judgment on Liberty's negligence and product liability claims. For the reasons set forth below, the Court grants the motion to exclude in part and grants the motion for summary judgment.

I. BACKGROUND

Kroonblawd owns and operates Carolina Catering, a mobile food concession business specializing in fried foods that travels to and sells food products at festivals in approximately

fifteen states. Carolina Catering prepares its fried foods in fryers that hold about five gallons of vegetable oil. Kroonblawd cleans the fryers using terrycloth towels.

CFC distributes shortenings and oils to the retail and food service industries. CFC sells Creamy Shortening, a vegetable oil made from a blend of soybean oil and partially hydrogenated soybean oil, in five-gallon containers.¹

On October 13, 2004, Kroonblawd returned to his home in Minnesota after working at a festival in Nebraska. Kroonblawd testified that he washed the towels used to clean the fryers at the Nebraska festival in his home the following morning. According to Kroonblawd, he asked his sister Dawn Kroonblawd, who lived with him, to remove the towels from the dryer when the drying cycle was complete. Dawn testified that she removed and folded T-shirts and aprons from the Nebraska job and placed them on an ironing board before leaving for work that morning. She did not remember removing and folding towels. A friend of Dawn's entered the Kroonblawd residence that afternoon and discovered "two piles of clothes or rags or something" smoldering on the ironing board, one at each end. He put each pile into a stainless steel pot and took the pots outside. The fire caused \$213,248.56 worth of smoke damage to the Kroonblawd residence, for which Liberty provided insurance coverage.

For purposes of this motion, CFC concedes that spontaneous combustion caused the fire at the Kroonblawd residence and that cloth towels soaked with oil can spontaneously combust.² The Creamy Shortening container and packaging do not warn that towels contaminated with

¹ Creamy Shortening also contains an antifoam agent and an antioxidant agent, which stabilizes the oil. The parties do not allege that these agents played any role in the fire at the Kroonblawd residence.

² Spontaneous combustion is "the outbreak of fire in combustible materials (as oily rags or damp hay) that occurs without application of direct flame or spark and is usually caused by slow oxidation processes (as atmospheric oxidation or bacterial fermentation) under conditions not permitting dissipation of heat." *Webster's Third New International Dictionary* 2204 (2002).

Creamy Shortening may spontaneously combust or that towels contaminated with Creamy Shortening may spontaneously combust after laundering.

On February 20, 2008, Liberty filed suit against CFC in state court alleging that the fire occurred when towels contaminated with CFC's Creamy Shortening spontaneously combusted after their removal from the dryer. Liberty's negligence and product liability claims are based on a failure-to-warn theory. On March 26, 2008, CFC removed the action to this Court on the basis of diversity jurisdiction. CFC now moves to exclude Liberty's expert reports and testimony and for summary judgment on Liberty's negligence and product liability claims.

II. DISCUSSION

A. Motion to exclude the expert report and testimony of Karosas

CFC moves to exclude the expert report and testimony of George V. Karosas under Rule 702 of the Federal Rules of Evidence, contending that Karosas did not employ a valid methodology or valid reasoning in drawing his conclusions and his opinion is based on unreliable data.³ Rule 702 provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

When evaluating the admissibility of expert testimony, a trial court serves as the "gatekeeper" that ensures the reliability and relevance of the expert testimony offered into evidence. *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 149 (1999). A court must exclude expert testimony if it is "so fundamentally unreliable that it can offer no assistance to the jury."

³ The admissibility of expert testimony in diversity cases is governed by federal law. *Unrein v. Timesavers, Inc.*, 394 F.3d 1008, 1011 (8th Cir. 2005).

Meterlogic, Inc. v. KLT, Inc., 368 F.3d 1017, 1019 (8th Cir. 2004). A court may consider a number of non-exclusive factors when determining the reliability of expert testimony, including: (1) whether the theory or technique can (or has been tested), (2) whether the theory has been subjected to peer review and publication, (3) the known or potential rate of error, and (4) whether the theory has been generally accepted. *Peitzmeier v. Hennessy Indus., Inc.*, 97 F.3d 293, 297 (8th Cir. 1996). In addition, “a district court ‘may conclude that there is simply too great an analytical gap between the data and the opinion proffered.’” *Smith v. Cangieter*, 462 F.3d 920, 924 (8th Cir. 2006) (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)).

Karosas opined that the failure to warn consumers that towels contaminated with Creamy Shortening could spontaneously combust after laundering rendered Creamy Shortening defective and unreasonably dangerous. As is its duty, the Court considers whether Karosas’s testimony is based on sufficient facts or data, if it is the product of reliable principles and methods, and if Karosas has applied the principles and methods reliably to the facts of the case. *See* Fed. R. Evid. 702. Karosas, who has no professional experience with spontaneous combustion or warnings for vegetable oil, did not conduct any testing in forming his opinion. Rather, he based his opinion on publicly available references. He first cited three fire safety treatises for the proposition that the risk of spontaneous combustion of towels contaminated with vegetable oil is known. Karosas then referred to statistics compiled by the National Fire Protection Association (NFPA). According to Karosas, the NFPA statistics “indicate that for structure fires caused by spontaneous heating or chemical reaction, the top two individual categories of the first product ignited are cotton or rayon fabric and oily rags” and that spontaneous combustion of oily rags or fabrics caused an average of 1615 fires per year between 1994 and 1998. Karosas also cited a study conducted by the Soap and Detergent Association (SDA) in 1996 demonstrating that

laundered towels may retain 3% residual oil and that such towels “have the potential to exhibit self heating.”⁴ Finally, Karosas cited a release issued by the United States Consumer Product Safety Commission (CPSC) in 1992. The release advised consumers that cloth towels used to wipe or drain large quantities of vegetable oil can catch fire if heated, that normal laundering may not remove all of the oil from the cloth, and that towels containing vegetable oil may begin to smoke and catch fire if they are dried in a clothes dryer and left in the dryer or a pile while warm.

Karosas’s sources establish that the risk of spontaneous combustion of towels contaminated with vegetable oil was known; however, the sources give no indication of the likelihood—the probability of the risk—that towels contaminated with soybean oil will spontaneously combust if they are washed, dried in a clothes dryer, and left in a pile, which is the risk alleged to have caused the damage to the Kroonblawd residence. Karosas acknowledged during his deposition that there is no indication in the NFPA data of how many of the 1615 fires per year occurred in residential or commercial properties, what type of oil was involved in the fire, or where the fire originated (e.g., in a dryer or elsewhere). The NFPA statistics therefore provide no basis for assessing how many fires are caused each year by the spontaneous combustion of towels contaminated with vegetable oil or soybean oil and then laundered.⁵ The CPSC release referred to the post-laundering spontaneous combustion of towels contaminated with vegetable oil in terms of possibilities, not probabilities, and described the risk as only a “potential risk.” While the SDA study stated that self heating of towels having 3% residual oil

⁴ Karosas also asserted, without any citation, that “[o]ther tests and investigations” show that up to 30% residual oil remains on towels after laundering.

⁵ Karosas testified that he would “expect” the risk of fire caused by vegetable oil to be “somewhat proportional” to its propensity to spontaneously combust, but did not quantify that propensity or describe the relationship between the propensity and the risk.

may occur and that self heating is an indicator of the potential for spontaneous combustion, there is no suggestion as to how likely it is that self heating, much less spontaneous combustion, will occur. Moreover, the SDA study acknowledged that the relationship between the potential for self heating and the actual occurrence of combustion is not known. Consequently, the CPSC and SDA references also fail to provide a basis for determining the probability of the risk that caused the damage to the Kroonblawd residence.

As indicated by the preceding description of the sources relied upon by Karosas, his opinion is based on little more than “general observations of the evidence and general scientific principles,” and requires “too great an inferential leap” between it and the sources. *See Presley v. Lakewood Eng’g & Mfg. Co.*, 553 F.3d 638, 646 (8th Cir. 2009) (affirming exclusion of expert testimony consisting of applications of general observations and general science which led to vague theorizing based upon general principles). Without any assessment of the probability of the risk, Karosas’s opinion that the failure to warn consumers that towels contaminated with Creamy Shortening could spontaneously combust after laundering rendered the product defective and unreasonably dangerous is “simply not linked” to the undisputed fact that towels soaked in vegetable oil could spontaneously combust. *See Cangieter*, 462 F.3d at 923-25 (affirming exclusion of expert testimony where “too great an analytical gap” between conclusion that four-wheel drive vehicle was unsafe at highway speeds and undisputed fact that loss of traction could occur with four-wheel drive because expert had performed no testing and cited no experiments or research indicating when loss of traction would occur or extent of loss at highway speeds). Consequently, the Court concludes that Karosas’s opinion is unreliable because it is not based on sufficient facts or data.

Moreover, Karosas did not reliably apply the methodology used by safety professionals to the facts of this case. In his report, Karosas described the process followed by safety professionals when determining if a product is reasonably safe, where “reasonably safe” means that risks associated with reasonably foreseeable uses and misuses are eliminated or reduced to a reasonable level. This process begins with an identification of reasonably foreseeable hazards. Safety professionals then determine whether a warning is appropriate based on several factors, including the probability of the harm. Karosas did not proceed according to this methodology in at least two significant respects. First, he failed to establish that cleaning up Creamy Shortening with towels and subsequently laundering the towels was a reasonably foreseeable use or misuse of Creamy Shortening. Although he asserted that clean up of spills of Creamy Shortening was reasonably foreseeable, his report contains no data (or any other source) supporting his assumption that it was reasonably foreseeable that someone would use cloth towels to clean out five-gallon fryers and then launder those towels. Second, because Karosas did not determine the probability of the harm that damaged the Kroonblawd residence, he determined that a warning was appropriate without considering one of the relevant factors. Karosas’s failure to reliably apply the methodology used by safety professionals to the facts of this case provides an additional ground for excluding his report. *See Presley*, 553 F.3d at 645 (affirming exclusion of expert testimony where expert failed to reliably apply NFPA standards to facts).

In summary, Karosas extrapolated that (1) it was reasonably foreseeable that towels contaminated with Creamy Shortening could spontaneously combust if washed, dried in a clothes dryer, and left in a pile and (2) such a use of Creamy Shortening was reasonably foreseeable from little more than the known (but unquantified) risk that towels soaked in vegetable oil could spontaneously combust and a single occurrence (the fire at the Kroonblawd

residence) of such an incident. “Trained experts commonly extrapolate from existing data. But nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert.” *Joiner*, 522 U.S. at 146; *see Bland v. Verizon Wireless, (VAW) L.L.C.*, 538 F.3d 893, 898-99 (8th Cir. 2008) (affirming exclusion of expert testimony because gap between data and expert’s opinion was too great). Karosas’s opinion is an almost perfect example of such an *ipse dixit* opinion. The unreliability of Karosas’s opinion is further demonstrated by the lack of evidence that an extrapolation of this type is accepted in the scientific community or of any peer-reviewed articles supporting his opinion or the manner in which he arrived at it. *See Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 593-94 (1993). Karosas’s opinion is fundamentally unreliable and can offer no assistance to a jury. For these reasons, the Court grants CFC’s motion to strike the expert report and testimony of Karosas as unreliable under Rule 702.⁶

B. Motion for summary judgment

Summary judgment is proper “if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(c). The movant “bears the initial responsibility of informing the district court of the basis for its motion,” and must identify “those portions of [the record] which it believes demonstrate the absence of a genuine issue of material fact.” *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). If the movant satisfies its burden, the nonmovant must respond by submitting evidentiary materials that “set out specific facts showing a genuine issue for trial.” Fed. R. Civ. P. 56(e)(2); *see Matsushita Elec. Indus. Co.*

⁶ CFC also contends that Karosas is not qualified as an expert, and moves to exclude his expert report and testimony because Liberty served the expert report on CFC four days late and under Rule 26(a)(2)(B) of the Federal Rules of Civil Procedure. Because the Court finds Karosas’s opinion is unreliable under Rule 702, the Court does not decide these issues.

v. Zenith Radio Corp., 475 U.S. 574, 587 (1986). In determining whether summary judgment is appropriate, a court must look at the record and any inferences to be drawn from it in the light most favorable to the nonmovant. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986).

A United States District Court sitting in diversity jurisdiction applies the substantive law of the state in which it sits. *Fogelbach v. Wal-Mart Stores, Inc.*, 270 F.3d 696, 698 (8th Cir. 2001). To succeed on its failure-to-warn negligence and product liability claims under Minnesota law, Liberty must show that: (1) CFC had a duty to warn about the risk in question, (2) the warning given was inadequate, and (3) the lack of warning caused Liberty's injuries. *See Seefeld v. Crown, Cork & Seal Co.*, 779 F. Supp. 461, 464 (D. Minn. 1991). CFC asserts that summary judgment is appropriate because Liberty has not shown that CFC had a duty to warn that towels contaminated with Creamy Shortening could spontaneously combust after laundering. Whether a manufacturer has a duty to warn of the danger associated with using a product is a question of law for a court. *Germann v. F.L. Smithe Mach. Co.*, 395 N.W.2d 922, 924 (Minn. 1986).

When deciding whether a duty to warn exists, a court must consider the event causing the damage and the alleged negligent act. *Id.* If the connection is too remote to impose liability as a matter of public policy, a court must find there is no duty, and consequently, no liability. *Id.* If the consequence is direct and is the type of occurrence that was or should have been reasonably foreseeable, however, a court must find a duty exists as a matter of law. *Id.* In the negligence context, "foreseeability" means a level of probability that would cause a prudent person to take effective precautions. *C.B. ex rel. L.B. v. Evangelical Lutheran Church in Am.*, 726 N.W.2d 127, 136 (Minn. Ct. App. 2007).

CFC contends that Liberty has not shown that it was reasonably foreseeable that towels contaminated with Creamy Shortening would spontaneously combust after laundering. Liberty responds that it was known in CFC's industry that Creamy Shortening has a tendency to spontaneously combust. Liberty asserts that several publications support this contention, including the CPSC release, two treatises on fire safety, the NFPA statistics, studies conducted by the SDA, and an article published on the Internet at ApplianceMagazine.com.⁷ The Court considers each publication in turn.

As previously explained, the CPSC release indicated that post-laundering spontaneous combustion of towels contaminated with vegetable oil is possible, but gave no indication of the probability of such an occurrence. While the CPSC release noted that this "potential risk" was "observed in preliminary lab tests," it did not provide any information about the test conditions. Further, the release stated that the CPSC was aware of "only a few confirmed fires related to oil-soaked cloths." The release, which addressed the spontaneous combustion of oil-soaked towels both before and after laundering, did not state how many of the confirmed fires, if any, involved laundered towels. Therefore, the Court concludes that the CPSC release does not establish that it was reasonably foreseeable that towels contaminated with Creamy Shortening would spontaneously combust after laundering.

Liberty cites two treatises on fire safety for the proposition that the danger of spontaneous combustion of vegetable oil was known. Liberty also cites the testimony of Richard Cummisford, the Quality Director for CFC, that towels contaminated with Creamy Shortening

⁷ CFC did not object to the admissibility of these publications.

“could” spontaneously combust.⁸ The risk that caused the damage to the Kroonblawd residence, however, was the risk that towels contaminated with soybean oil would spontaneously combust *after laundering*, not the general risk of spontaneous combustion of vegetable oil or towels soaked with vegetable oil. The treatises and Cummisford’s testimony do not mention the possibility of spontaneous combustion after laundering. The expert report of David J. Brien, in which he opined that Creamy Shortening could spontaneously combust under certain conditions, is unpersuasive because it also does not address the risk after laundering. Liberty also relies on an article indicating that spontaneous combustion is a “probable cause” of laundry fires, but this article did not mention a single instance of a fire that occurred when towels contaminated with vegetable oil spontaneously combusted after they were laundered, much less quantify the risk of such a fire. Liberty’s reliance on the NFPA statistics is similarly misplaced because the statistics did not quantify the risk at issue in this case.

Finally, Liberty maintains that the ApplianceMagazine.com article and studies conducted by the SDA show that the risk that towels contaminated with Creamy Shortening could spontaneously combust after laundering was known to CFC or in CFC’s industry. The ApplianceMagazine.com article described the first part of a two-part study of the “spontaneous combustion tendency of various contaminants on clothing loads placed in household clothes dryers.” The self-heating propensity of thirty-two potential contaminants was evaluated during the first part of the study using the Mackey Test, which is an isothermal test originally used to assess the self-heating and ignition hazard associated with the oxidation of oils used in the wool

⁸ Cummisford also testified that he was unaware of any testing conducted by CFC or in the food shortening and oil industry related to spontaneous combustion of vegetable oil or the proper way to launder towels used to clean up vegetable oil. According to Cummisford, CFC’s internal policy is to clean up spills of Creamy Shortening using paper towels because it is “the easiest way of doing it.”

industry. Each contaminant was added to a sheet of cotton cheesecloth, which was then rolled into a tight cylinder and heated in a convection oven to 125°C while tracking the temperature in the cylinder's center using a thermocouple. Based on the results of the Mackey Test, the article concluded that cotton cheesecloth soaked in soybean oil “definitively self-heated to the point of ignition.”

Several statements in the ApplianceMagazine.com article, however, counsel against concluding that the risk of spontaneous combustion post-laundering was reasonably foreseeable based on the results of the Mackey Test. The article stated that “the Mackey Test is a poor predictor of those conditions necessary to obtain self-heating to the point of ignition,” and further cautioned that the Mackey Test “is only indicative of self-heating behavior under a very specific set of parameters,” which “are not representative of conditions found in household dryers.” Given the lack of correlation between the Mackey Test and actual instances of spontaneous combustion, the identification of soybean oil as definitively self heating to the point of ignition using the Mackey Test does not demonstrate that the risk that towels contaminated with soybean oil would spontaneously combust after laundering was reasonably foreseeable.⁹ The SDA studies, which also relied upon the Mackey Test, are unpersuasive for the same reason. In addition, the SDA studies and ApplianceMagazine.com article appear directed to those in the laundry industry, not companies such as CFC that supply cooking oils to the food service and retail industries.

In short, there is no evidence in the record that provides any basis for determining the probability that towels contaminated with Creamy Shortening will spontaneously combust after

⁹ Full-scale tests using clothes dryers were conducted in the second part of the study. The dryer tests were described in Part II of the ApplianceMagazine.com article, which Liberty did not submit to the Court.

laundering. In fact, there is no evidence in the record of a single other instance where towels contaminated with Creamy Shortening, or soybean oil, spontaneously combusted after laundering. Further, Liberty submitted no evidence indicating that any other vegetable oil manufacturer warned of this danger, or was even aware of it. Consequently, Liberty has not shown that it was reasonably foreseeable that towels contaminated with Creamy Shortening could spontaneously combust after laundering.

Moreover, as stated by counsel for Liberty at oral argument, the fire at the Kroonblawd residence resulted from a “perfect storm of events.” The possibility that such a perfect storm could occur is too remote to impose a duty to warn on CFC (and possibly on every manufacturer, distributor, and retailer of a cooking oil that “could” spontaneously combust), particularly where the storm originated in Kroonblawd’s clean-up and laundry practices. Even if the risk of such a fire were reasonably foreseeable, the duty to warn would be better placed on manufacturers of laundry equipment, some of which, as noted in Karosas’s expert report, already include warnings on their products that: “No washer can completely remove oil” and “Do not dry anything that has ever had any type of oil on it (including cooking oils). Doing so can result in death, explosion or fire.”¹⁰ As a matter of policy, the Court will not impose on CFC a duty to warn that if textiles become soiled with Creamy Shortening, they could spontaneously combust if they are washed, dried in a clothes dryer, and left in a pile. CFC’s motion for summary judgment on Liberty’s failure-to-warn negligence and product liability claims is granted.¹¹

¹⁰ The Court questions whether these warnings would have prevented the fire at the Kroonblawd residence, as neither warning suggests that spontaneous combustion could occur after removal of the laundry from the dryer.

¹¹ CFC moves to strike the expert reports and testimony of Brien and Jerry Tasa as untimely and under Rules 26(a)(2)(B) and 702. For the reasons stated above, Brien’s opinion that Creamy Shortening could spontaneously combust under certain conditions does not establish

III. CONCLUSION

Based on the files, records, and proceedings herein, and for the reasons stated above, IT

IS ORDERED THAT:

1. CFC's motion to exclude the expert reports and testimony of Liberty's experts [Docket No. 15] is GRANTED insofar as CFC seeks exclusion of the expert report and testimony of George V. Karosas under Rule 702.
2. The remainder of CFC's motion to exclude the expert reports and testimony of Liberty's experts [Docket No. 15] is DENIED AS MOOT.
3. CFC's motion for summary judgment [Docket No. 15] is GRANTED.
4. Liberty's Complaint [Docket No. 1] is DISMISSED WITH PREJUDICE.

LET JUDGMENT BE ENTERED ACCORDINGLY.

Dated: October 23, 2009

s/ Joan N. Ericksen
JOAN N. ERICKSEN
United States District Judge

a duty to warn. Tasa's opinion that the fire at the Kroonblawd residence was caused by the spontaneous combustion of rags placed in a box on the ironing board is not relevant to whether CFC had a duty to warn. CFC also moves for summary judgment on the ground that Liberty has not shown that the materials that spontaneously combusted were contaminated with Creamy Shortening rather than some other vegetable oil. Because the Court concludes that CFC had no duty to warn of the risk that towels contaminated with Creamy Shortening could spontaneously combust after laundering, the Court does not address these issues.